

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 1, line 3, with the following rewritten paragraph:

--The present invention relates to a photodiode, and particularly to a structure for improving the short wavelength region photo sensitivity of a photodiode, and to a method of manufacturing the photodiode.--

Please replace the paragraph beginning at page 3, line 9, with the following rewritten paragraph:

--The present invention has been made in view of the foregoing drawbacks in the conventional art, and has an object to provide a photodiode which can improve the photo sensitivity in a shorter wavelength region, as compared with a conventional photodiode, without increasing leak current.--

Please replace the paragraph beginning at page 3, line 14, with the following rewritten paragraph:

--In order to solve the above-mentioned problem, according to the present invention, a photodiode includes a first conductive type semiconductor region, and a plurality of second conductive type semiconductor layers formed on the surface of the first conductive type semiconductor region, the

first conductive type semiconductor region and the plurality of second conductive type semiconductor layers constituting an optical detection portion for detecting an optical signal and outputting its photoelectric conversion signal, wherein the surface of the first conductive type semiconductor region between the second conductive type semiconductor layers is removed. By this construction, since the surface of the first conductive type semiconductor region between the second conductive type semiconductor layers is removed, the interface level of the surface of the first conductive type semiconductor region between the second conductive type semiconductor layers is removed.--

Please replace the paragraph beginning at page 4, line 7, with the following rewritten paragraph:

--Furthermore, the surface of the first conductive type semiconductor region is removed by a wet etching method, so that the region can be removed without generating an interface level due to etching damage.--

Please replace the paragraph beginning at page 4, line 14, with the following rewritten paragraph:

--When a reverse bias is applied to the photodiode constituted by the first conductive type semiconductor region

and the second conductive type semiconductor layers, a depletion layer is extended in accordance with the bias voltage. Since the depletion layer is extended not only in the vertical direction but also in the horizontal direction, the depletion layer is extended not only in the vertical direction but also in the horizontal direction, the depletion layer is also formed on the surface of the first conductive type semiconductor region, and the photo sensitivity in a short wavelength region is improved. At this time, the respective second conductive type semiconductor layers are made to have the same potential. Thus, when the distance between the second conductive type semiconductor layers is made about twice the width of the depletion layer, since the depletion layers of adjacent photodiodes formed of the first conductive type semiconductor region and the second conductive type semiconductor layers just come in contact with each other, the efficiency is excellent.--

Please replace the paragraph beginning at page 5, line 12, with the following rewritten paragraph:

Furthermore, when the interface level of the surface of the first conductive type semiconductor region is removed by using the wet etching method, the interface level can be removed without generating an interface level due to etching damage.--

Please replace the paragraph beginning at page 6, line 2, with the following rewritten paragraph:

--An embodiment of the present invention will be described below with reference to the drawings. Fig. 1 is a schematic sectional view showing an embodiment of a photodiode of the present invention.--

Please replace the paragraph beginning at page 7, line 2, with the following rewritten paragraph:

--It is understood that the respective conductive types may be reversed. For example, a plurality of first conductive type semiconductor layers are formed on a second conductive type semiconductor region, and the interface level of the surface of the second conductive type semiconductor region between the first conductive type semiconductor layers is removed by a wet etching method.--

Please replace the paragraph beginning at page 7, line 9, with the following rewritten paragraph:

--Further, it is understood that a portion between the second conductive type semiconductor layers is not limited to a only one portion, but plural portions may be formed.--

Please replace the paragraph beginning at page 8, line 6, with the following rewritten paragraph:

--Furthermore, since the interface level of the surface of the first conductive type semiconductor region between the second conductive type semiconductor layers is removed, the leak current can be suppressed without greatly influencing the photo sensitivity.--

Please replace the paragraph beginning at page 8, line 10, with the following rewritten paragraph:

--Furthermore, since the interface level of the surface of the first conductive type semiconductor region between the second conductive type semiconductor layers is removed by using the wet etching method, the interface level can be removed without generating an interface level due to etching damage.--

IN THE CLAIMS:

Kindly amend claims 1-3 as follows:

1. (Amended) A photodiode comprising: an optical detection portion for detecting an optical signal and outputting a photoelectric conversion signal, the optical detection portion having a semiconductor substrate of a first